

#### United States Patent and Trademark Office

WITTED STATES DEPARTMENT OF COMMERCE United States Patent and Tradamark Office Address COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.O. 2020

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/498,857	02/07/2000	Kazuhiko Yamaguchi	<b>FUЛ</b> 16.987 93			
75	90 03/24/2003		EXAMINI	SR.		
Helfgott & Karas Empire State Build			JUNG, M	IIN		
New York, NY 101	118		ART UNIT	PAPER NUMBER		
UNITED STATES			2663			
			DATE MAILED: 03/24/2003			

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Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1993 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.

Match and Return

Thomas Bean fax 212-894-5629 tel 212-940-8729

Page 3 of 4

PTOL-85 (REV. 04-02) Approved for use through 01/31/2004.

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### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Tradsmark Office Address: CondissionER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

### NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

03/24/2003

Helfgott & Karas PC Empire State Building 60th floor New York, NY 10118 EXAMINER

JUNG, MIN

ART UNIT CLASS-SUBCLASS

370-330000

2663 DATE MAILED: 03/24/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/498,857	02/07/2000	Kazuhiko Yamaguchi	FUJI 16.987	9388

TITLE OF INVENTION: BASE STATION APPARATUS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$0	\$1300	06/24/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
  - □ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Page 1 of 4

### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE Commissioner for Patents Washington, D.C. 20231 (703)746-4000 INSTRUCTIONS: This form should be used for transmitting the ISSUE FRE and PUBLICATION FEE (if required). Blocks I through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for CORREST CORRESPONDENCE ADDRESS (NOR LANDY MAIS-IN Note: A certificate of mailing can only be used for domestic mailings of the Pec(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 03/24/2003 Helfgott & Karas PC Empire State Building 60th floor Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Fostal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below. New York, NY 10118 (Depositor's name (Siene æ APPLICATION NO. PILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/498,857 02/07/2000 Kazuhiko Yamaguchi FUЛ 16.987 9388 TTILE OF INVENTION: BASE STATION APPARATUS APPLN. TYPE SMALL ENTITY ISSUE FEE PUBLICATION FEB TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1300 \$1300 06/24/2003 **EXAMINER** ART UNIT CLASS-SUBCLASS JUNG, MIN 2663 370-330000 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. single firm (having as a member a registered atterney or agent) and the names of up to 2 ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Custom Number is required. registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): A check in the amount of the fee(s) is enclosed. Q Lesuc Fee ☐ Payment by credit card. Form PTO-2038 is attached. O Publication Fee O The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_(enclose an extra copy of this form). ☐ Advance Order - # of Copies Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, D.C. 20231.

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PTOL-85 (REV. 04-02) Approved for use through 01/31/2004. OMB 0651-0033

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#### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMERCIANT OF PATENTS AND TRADEMARK Westington, D.O. 20231

APPLICATION NO. FILING DATE		ILING DATE	PIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/498,857	09/498,857 02/07/2000		Kazuhiko Yamaguchi	FUJI 16.987	9388
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				DATE MAILED: 03/24/2003	

## Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)
	09/498.857	YAMAGUCHI, KAZUHIKO
Notice of Allowability	Examiner	Art Unit
	Min Jung	2663
— The MAILING DATE of this communication apperature. All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313  1. ☑ This communication is responsive to Application filed Feb. 2. ☑ The allowed claim(s) is/are 1-7.  3. ☑ The drawings filed on 07 February 2000 are accepted by the Acknowledgment is made of a claim for foreign priority under a) ☑ All b) ☐ Some* c) ☐ None of the:  1. ☑ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have 3. ☐ Copies of the priority documents have 3.	(OR REMAINS) CLOSE) or other appropriate cor IGHTS. This application is and MPEP 1308.  TUTRY 7, 2000.  The Examiner.  der 35 U.S.C. § 119(a)-(c)  be been received.  be been received in Application in Application in Application has been received.	t with the correspondence address— D in this application. If not included mmunication will be mailed in due course. THIS its subject to withdrawal from issue at the initiative  d) or (f).  cation No elved in this national stage application from the  (to a provisional application).
6. Acknowledgment is made of a claim for domestic priority u	inder 35 U.S.C. §§ 120 a	nd/or 121.
Applicant has THREE MONTHS FROM THE "MAILING DATE" or below. Failure to timely comply will result in ABANDONMENT of	this application. THIS 1	THREE-MONTH PERIOD IS NOT EXTENDABLE.
7. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which gives read		
8. CORRECTED DRAWINGS must be submitted.  (a) including changes required by the Notice of Draftsper  1) hereto or 2) to Paper No.  (b) including changes required by the proposed drawing  (c) including changes required by the attached Examiner	correction filed	which has been approved by the Examiner.
identifying indicia such as the application number (see 37 CFR to feach sheet. The drawings should be filed as a separate paper	I.84(c)) should be written or with a transmittal letter a	on the drawings in the top margin (not the back) indiressed to the Official Draftsperson.
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR 1		
Attachment(s)		
<ul> <li>1⊠ Notice of References Cited (PTO-892)</li> <li>3⊠ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>5⊠ Information Disclosure Statements (PTO-1449), Paper No. 3</li> <li>7□ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	4□ Inter 9. 6□ Exa	ce of Informal Patent Application (PTO-152) rview Summary (PTO-413), Paper No miner's Amendment/Comment miner's Statement of Reasons for Allowance er

Application/Control Number: 09/498,857

Art Unit: 2663

1. The following is an examiner's statement of reasons for allowance: All the claims are allowable over the prior art of record because prior art fail to teach or fairly suggest a base station apparatus which divides one cell into a plurality of sectors and communicates with a plurality of terminal stations according to TDMA via antennas which are provided for each of the sectors, the base station apparatus comprising: a frequency-based distributor and modulator unit which distributes each of channel data to be transmitted in correspondence with each of time slots of a plurality of transmission frequency-based channels, and modulates the distributed channel data to modulated signals; a sector-based distributor and multiplexer unit which distributes the modulated signals to sector-based channels which are prescribed in advance in correspondence with the time slots, and multiplexes the distributed modulated signals for each of the sector-based channels; and a channel connection controller which generates distribution control information of each of the transmission frequency-based channels

Page 2

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

and the sector based channels depending on a channel connect or disconnect request.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 703-305-4363. The examiner can normally be reached on Monday-Friday, 7AM-3PM.

Application/Control Number: 09/498,857

Art Unit: 2663

Page 3

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

MJ March 21, 2003

Min Jung Primary Examiner

	Notice of References Cited				09/498,857 ReyAl		Reexamination YAMAGUCH	Applicant(s)/Patent Under Reexamination YAMAGUCHI, KAZUHIKO		
ı			S Onco	Examiner Art Unit Min Jung 2663				Page 1 of 1		
							2003			
	_	Document Number	Date	U.S. F/	ATENT DOCUMENTS	· · ·	·····			
*		Country Code-Number-Kind Code	MM-YYYY		Nan	ie		Classification		
*	Α	US-6,317,423	11-2001	Jantti e	t al.	•		370/347		
*	В	US-6,385,188	05-2002	Kim et	ai.			370/342		
*	O	US-6,483,823	11-2002	Mansou	ır, Nagi A.			370/330		
*	D	US-6,236,866	05-2001	Meyer	et al.		455/562			
X	Ε	US-5,790,959	08-1998	Schere	r, Dieter		455/561			
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication detes. Classifications may be US or foreign.

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Patent and Trademark Office U.S. DEPARTMENT OF COMMERCE

1449/PTO

U.S. Department of Commerce Patent and Trademark Office Application No.
Filing Date

First Named Inventor: K. YAMAGUCHI

Group Art Unit

Examiner Name : Attorney Docket No. : FUJI 16.987

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Sheet 1 of

U.S. PATENT DOCUMENTS								
Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Document	Kind Code if known <sup>2</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Pages, Columns Lines Where Relevant Passages or Relevant Figures Appear		
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Examiner Initials	Cite No.	Foreign Patent Document Office Number' Kind Code' (if	Country	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Pages, Columns Lines Where Relevant Passages or Relevant Figures Appear
my		62-104232	JP	NIPPON TELEGR & TELPH CORP	5/14/87	
m		63-272137	JР	TOKYO ELECTRIC POWER CO INC	11/9/88	
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Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Braw a line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.1<sup>6</sup> if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take .2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it displays a valid OMB control number. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.